

WHAT IS CLAIMED IS:

1. A solid state imaging apparatus which includes a plurality of pixels two-dimensionally arranged in the vertical direction and the horizontal direction and in which every two vertically or horizontally adjacent ones of the plurality of pixels includes color
5 filters of different colors, the apparatus comprising signal output means for sequentially outputting, in a predetermined period of time, charge signals received from ones of the plurality of pixels including color filters of the same color.

2. The solid state imaging apparatus of claim 1, wherein the signal output means
10 includes means for sequentially outputting, in the predetermined period of time, charge signals received from ones of the plurality of pixels arranged in the horizontal direction and including color filters of the same color.

3. The solid state imaging apparatus of claim 1, wherein the signal output means
15 includes means for sequentially outputting, in the predetermined period of time, charge signals received from ones of the plurality of pixels arranged in the vertical direction and including color filters of the same color.

4. The solid state imaging apparatus of claim 1, wherein the signal outputting
20 means includes a first shift register for performing sequential scanning to ones of the plurality of the pixels arranged in the vertical direction or the horizontal direction and a second shift register for performing sequential scanning to ones of the plurality of the pixels arranged in the vertical direction or the horizontal direction and including color filters of the same color.

5. The solid state imaging apparatus of claim 1, wherein the signal outputting means includes a shift register for performing sequential scanning to ones of the plurality of the pixels arranged in the vertical direction or the horizontal direction and output means for switching between a first output method in which charge signals received from the shift register are output so that charge signals of pixels arranged in the vertical direction or the horizontal direction are sequentially output and a second output method in which charge signals received from the shift register are sequentially output so that charge signals of pixels including color filters of the same color are sequentially output and then outputting charge signals.

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6. A solid state imaging apparatus comprising:

a plurality of pixels two-dimensionally arranged in the row direction and the column direction;

a sensor section for outputting a plurality of selection signals so that each of the selection signals corresponds to one of a plurality of pixel arrays extending in the row direction or the column direction in an arrangement of the plurality of pixels;

a first driving circuit for making the sensor section output the selection signals to the pixel arrays so that one of the selection signals for one of the pixel arrays is output at a time; and

a second driving circuit for making the sensor section output the selection signals to the pixel arrays so that ones of the selection signals for plural ones of the pixel arrays are output at a time.

7. The solid state imaging apparatus of claim 6, further comprising a selection circuit for selecting a first driving signal sequentially output from the first driving circuit so

that the first driving signal corresponds to each of the pixel arrays or a second driving signal sequentially output from the second driving circuit so that the second driving signal corresponds to plural ones of the pixel arrays, and then outputting a selected driving signal to the sensor section.

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8. The solid state imaging apparatus of claim 7, wherein the selection circuit includes a first transistor group for outputting the first driving signals to the sensor section so that one of the selection signals for one of the pixel arrays is output at a time and a second transistor group for outputting the second driving signals to the sensor section so
10 that ones of the selection signals for plural ones of the pixel arrays are output at a time.

9. The solid state imaging apparatus of claim 8, wherein each of the first and second transistor groups includes a CMOS transistor.

15 10. The solid state imaging apparatus of claim 8, wherein each of the first and second transistor groups includes an NMOS transistor.

11. A method for driving a solid state imaging apparatus, the solid state imaging apparatus including a plurality of pixels two-dimensionally arranged in the row direction
20 and the column direction and a sensor section for outputting a plurality of selection signals so that each of the selection signals corresponds to one of a plurality of pixel arrays extending in the row direction or the column direction in an arrangement of the plurality of pixels, and having a static mode in which image pickup is performed to a static image and a moving image mode in which image pickup is performed to a moving image,
25 comprising:

a first step of outputting, when the static mode is selected, the selection signals from the sensor section to the pixel arrays so that one of the selection signals for one of the pixel arrays is output at a time; and

a second step of outputting, when the moving mode is selected, the selection
5 signals from the sensor section to the pixel arrays so that ones of the selection signals for plural ones of the pixel arrays are output at a time.

12. A camera comprising a solid state imaging apparatus which includes a plurality of pixels two-dimensionally arranged in the vertical direction and the horizontal direction
10 and in which every two vertically or horizontally adjacent ones of the plurality of pixels includes color filters of different colors,

wherein the solid state imaging apparatus includes signal output means for sequentially outputting, in a predetermined period of time, charge signals received from ones of the plurality of pixels including color filters of the same color.

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13. A camera comprising a solid state imaging apparatus which includes: a plurality of pixels two-dimensionally arranged in the row direction and the column direction; a sensor section for outputting a plurality of selection signals so that each of the selection signals corresponds to one of a plurality of pixel arrays extending in the row direction or
20 the column direction in an arrangement of the plurality of pixels; a first driving circuit for making the sensor section output the selection signals to the pixel arrays so that one of the selection signals in one of the pixel arrays is output at a time; and a second driving circuit for making the sensor section output the selection signals to the pixel arrays so that ones of the selection signals in plural ones of the pixel arrays are output at a time.